

## **REMARKS**

The present Amendment is in response to the Examiner's Office Action mailed November 8, 2007. Claims 1, 13, and 25 are amended, and no claims are added or cancelled. Claims 1, 3, and 6-32 are now pending in view of the above amendments.

Reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following remarks. For the Examiner's convenience and reference, Applicants' remarks are presented in the order in which the corresponding issues were raised in the Office Action.

### **I. General Considerations**

Applicants note that the remarks and amendments, or a lack of remarks, herein are not intended to constitute, and should not be construed as, an acquiescence, on the part of the Applicants: as to the purported teachings or prior art status of the cited references; as to the characterization of the cited references advanced by the Examiner; as to the whether any references were properly combined, or as to any other assertions, allegations or characterizations made by the Examiner at any time in this case. Further, Applicants reserve the right to challenge the purported teaching and prior art status of, as well as the motivation to combine, the cited references at any appropriate time.

In addition, the remarks herein do not constitute, nor are they intended to be, an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed herein are presented solely by way of example. Consistent with the foregoing, the discussion herein is not intended, and should not be construed, to prejudice or foreclose contemporaneous or future consideration, by the Applicants, of additional or alternative distinctions between the claims of the present application and any references cited by the Examiner, and/or the merits of additional or alternative arguments.

## **II. Rejection Under 35 U.S.C. § 103**

Applicants respectfully note at the outset that in order to establish a *prima facie* case of obviousness, it is the burden of the Office Action to demonstrate that three criteria are met: first, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; second, there must be a reasonable expectation of success; and third, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *MPEP* § 2143.

### **A. Claims 1, 3, and 6-12**

The Office Action rejects claims 1, 3, and 6-13 under 35 U.S.C. § 103 as being unpatentable over United States Patent No. 6,580,531 to Swanson et al. (“Swanson”) in view of United States Patent No. 5,757,998 to Thatcher (“Thatcher”). Applicants respectfully traverse this characterization for at least the reasons that will now be discussed.

As shown above, Applicants have amended claim 1 to recite in part “providing a tester apparatus comprising: a printed circuit board having a test circuit formed thereon, wherein the OSA is not disposed on the printed circuit board, and an electrical interface disposed in electrical communication with the test circuit . . .” (Emphasis added). Support for such amendment is found at least in Figures 2 and 3 and paragraphs [0041]-[0051] of the specification. In sharp contrast, the Office Action has not shown that the purported combination of Swanson and Thatcher teaches that an OSA is not disposed on or part of the printed circuit board that has the test circuit formed thereon in conjunction with the other elements of claim 1.

For example, column 4, lines 18-20 of Swanson teaches that “Fig.1 illustrates a test system establishing bias conditions for an optical transmitter 8 of an optical transceiver board 10.” Column 5, lines 29-34 of Swanson teaches that “FIG. 2. is a block diagram illustrating the logical layout of relevant functionality in an optical transceiver board 53 which corresponds to the board under test 10 in Fig 1. The optical transceiver board 53 includes an electro-absorption (EA) modulated transceiver which can be biased and/or tested by the disclosed system.” Further, column 11, lines 46-48 of Swanson teaches that “FIG. 7 shows the illustrative testing environment of FIG. 1 configured to perform bit error testing on an optical receiver 9 within the

optical transceiver board 10.” Accordingly, Swanson clearly teaches that element 10 of Figures 1 and 7 and element 53 of Figure 2 correspond to a transceiver board and that no other element of Swanson may reasonably be considered to be a **printed circuit board** having a test circuit formed thereon as recited in claim 1. It would simply be unreasonable to suggest as the Office Action does on page 2 that one of skill in the art would find it possible to include a test controller 14, communication analyzer 24, wave meter 30, power meter 36, and BER tester 52 on a printed circuit board as these elements are typically large, stand alone pieces of testing equipment.

Transmitter 8, receiver 9, laser 73, and photo detector 75 are the only elements of Swanson that may be considered an optical subassembly. However, it is clear from the portions of Swanson cited above, especially Figure 2, that each of these optical subassemblies are part of the transceiver board 10/53. For instance, the cited portions clearly state that transmitter 8 is part of transceiver board 10, that receiver 9 is part of transceiver board 10, and that laser 73 is part of transceiver board 53. Further, Figure 2 shows that photo detector 75 is part of transceiver board 53. Accordingly, Swanson does not teach or suggest providing a tester apparatus comprising: a printed circuit board having a test circuit formed thereon, wherein the OSA is not disposed on the printed circuit board, and an electrical interface disposed in electrical communication with the test circuit as recited in amended claim 1.

Turing now to Thatcher, Thatcher also does not teach or suggest providing a tester apparatus comprising: a printed circuit board having a test circuit formed thereon, wherein the OSA is not disposed on the printed circuit board, and an electrical interface disposed in electrical communication with the test circuit as recited in amended claim 1 and is not cited by the Office Action as teaching such. This is true as Thatcher does not even mention or suggest a testing circuit at all, let alone one that does or does not include an optical subassembly. Indeed, the Office Action merely relies on Thatcher to show that flexible circuits are allegedly known in the art.

Accordingly, **the combination of Swanson and Thatcher** fails to teach or suggest all of the limitations of amended claim 1. Applicants note that on page 7 of the Office Action, the Examiner indicates that one cannot show nonobviousness by attacking references individually where the rejections are based upon combinations of references. Applicants submit that this is true. However, Applicants note that it is the responsibility of the Examiner to show that all of

the elements of the claim are found in the combined references as recited in the claim. Accordingly, to maintain the obviousness rejection of amended claim 1, the Examiner will have to show that the combination of Swanson and Thatcher teach that an OSA is separate from a printed circuit board that contains a testing circuit. It is not enough to merely show that the combination teaches a printed circuit board and an OSA, but the combination must teach or suggest these elements structurally laid out as recited in amended claim 1. As discussed above, the combination of Swanson and Thatcher does not teach or suggest a tester apparatus comprising: a printed circuit board having a test circuit formed thereon, wherein the OSA is not disposed on the printed circuit board, and an electrical interface disposed in electrical communication with the test circuit as recited in amended claim 1.

Accordingly, the Applicants respectfully submit that the Office Action has failed to establish a *prima facie* case of obviousness with respect to claims 1, 3, and 6-12, at least because the Office Action has failed to show that the recited art, **either singularly or in combination**, teaches or suggests all of the claim limitations of amended claim 1. Applicants thus respectfully submit that the obviousness rejection of claim 1, 3, and 6-12 should be withdrawn.

**B. Claims 13 and 18-24**

The Office Action rejects claims 13 and 18-24 under 35 U.S.C. § 103 as being unpatentable over Swanson in view of Thatcher. Claims 14-17 are further rejected in view of United States Patent No. 6,765,396 to Barror ("Barror"). Applicants respectfully traverse this characterization for at least the reasons that will now be discussed.

As shown above, Applicants have amended claim 13 to recite in part "a printed circuit board having a test circuit formed thereon, the printed circuit board being disposed on the base member, wherein the optical subassembly is not disposed on the printed circuit board. . . ." (Emphasis added). Support for such amendment is found at least in Figures 2 and 3 and paragraphs [0041]-[0051] of the specification. In sharp contrast, the Office Action has not shown that the purported **combination of Swanson and Thatcher** teaches that an optical subassembly is not disposed on or part of the printed circuit board that has the test circuit formed thereon as discussed above in relation to amended claim 1.

In light of the foregoing, Applicants respectfully submit that the Office Action has failed to establish a *prima facie* case of obviousness with respect to claim 13 at least because the Office Action has not established that the references, **either alone or in combination**, teach or suggest all the limitations of amended claim 13. Accordingly, Applicants request that the rejection of claims 13 and 18-24 under 35 U.S.C. § 103 be withdrawn.

Dependent claims 14-17 depend from claim 13 and therefore include all of the limitations of amended independent claim 13. As discussed above in relation to amended independent claim 13, the purported combination of Swanson and Thatcher does not teach or suggest all of the limitations of amended claim 13. Barror does not teach the limitations of amended independent claim 13 missing in the purported combination of Swanson and Thatcher and is not cited by the Office Action as teaching such. Accordingly, even the purported **combination of Swanson, Thatcher and Barror** does not teach or suggest all of the limitations of claims 14-17. The Office Action has thus not shown a *prima facie* case of obviousness and the rejection under 35 U.S.C. § 103(a) to claims 14-17 should be withdrawn.

### C. Claims 25-32

The Office Action rejects claims 25-32 under 35 U.S.C. § 103 as being unpatentable over Swanson in view Thatcher and further in view of Barror and United States Patent No. 4,852,706 to Pietrzak et al ("Pietrzak"). Applicants respectfully traverse this characterization for at least the reasons that will now be discussed.

As shown above, Applicants have amended claim 25 to recite in part "a printed circuit board having a test circuit formed thereon, the printed circuit board being disposed on the base member, wherein the optical subassembly is not disposed on the printed circuit board. . . ." (Emphasis added). Support for such amendment is found at least in Figures 2 and 3 and paragraphs [0041]-[0051] of the specification. In sharp contrast, the Office Action has not shown that the **Swanson and Thatcher, either singularly or in combination**, teaches that an optical subassembly is not disposed on or part of the printed circuit board that has the test circuit formed thereon as discussed above in relation to amended claim 1.

The Office Action also does not show that Barror and Pietrzak teach or suggest a printed circuit board having a test circuit formed thereon, the printed circuit board being disposed on the

base member, wherein the optical subassembly is not disposed on the printed circuit board and are not cited by the Office Action as teaching such. This is especially true as Barror and Pietrzak do not even mention or suggest a testing circuit at all, let alone one that does or does not include an optical subassembly. Indeed, the Office Action relies on Barror and Pietrzak to show elements of the claim that are unrelated to a printed circuit board and an optical subassembly. Accordingly, the **combination** of Swanson, Thatcher, Barror and Pietrzak does not teach or suggest the newly added limitations of claim 25.

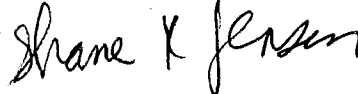
Accordingly, the Applicants respectfully submit that the Office Action has failed to establish a *prima facie* case of obviousness with respect to claims 25-32, at least because the Office Action has failed to show that the recited art, **either singularly or in combination**, teaches or suggests all of the claim limitations of claim 25. Applicants thus respectfully submit that the obviousness rejection of claim 25-32 should be withdrawn.

**CONCLUSION**

In view of the foregoing, Applicants believe the claims as amended or presently pending are in allowable form and that every issue raised by the Office Action has been addressed. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, or which may be overcome by an Examiner's Amendment, the Examiner is requested to contact the undersigned attorneys.

Dated this 28<sup>th</sup> day of February, 2008.

Respectfully submitted,



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